

# Notice of Allowability

Application No.

10/660,180

Examiner

Raj K. Jain

Applicant(s)

LAM ET AL.

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 9/11/03.
2. ☒ The allowed claim(s) is/are 1-7,10-20,23-38 renumbered 1-34.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date 9/11/03
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

## DETAILED ACTION

### EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Nathaniel Levine (203) 972-3460 on April 10, 2007.

Cancel claims 8, 9, 21 and 22.

Amend claims 7, 14, 17-20, 23, 24, 26, 27, 30-33 as follows,

7. (Currently Amended) A method comprising:

receiving a signal from a destination device, the signal indicative of a jitter condition detected by the destination device; and

determining, based at least in part on the received signal, a number of outbound telephony signal data frames for which transmission is to be deferred in case of detecting a tone in the outbound telephony signal data frames;

selectively deferring transmission based on a determined number of frames from the received sequence of outbound telephony signal data frames in response to the detected tone;

transmitting said determined number of frames if the detected tone has a duration that is less than a predetermined duration; and

selectively replacing each of said determined number of frames with a respective replacement data frame and transmitting said replacement data frames in response to

the duration of the detected tone at least equaling the predetermined duration, each said replacement data frame representing a silence audio signal.

14. (Currently Amended) An apparatus comprising:

a buffer; and

circuitry coupled to the buffer and ~~operative~~ configured to:

~~detecting~~ detecting a tone in each data frame of a sequence of telephony signal data frames;

~~transmitting~~ transmitting a first data frame of the sequence of telephony signal data frames immediately after detecting the tone therein;

~~deferring~~ deferring transmission of a last one or ones of the sequence of telephony signal data frames;

selectively ~~transmitting~~ transmitting the last one or ones of the sequence of data frames and a next data frame that immediately follows the sequence of telephony signal data frames in response to said next data frame not including the tone; and

selectively ~~transmitting~~ transmitting a respective replacement data frame in place of each one of the last one or ones of the sequence of data frames and in place of said next data frame in response to said next data frame including the tone.

17. (Currently Amended) The apparatus of claim 16, wherein said circuitry is further ~~operative to~~ configured to:

~~transmitting~~ transmitting a second data frame of the sequence of telephony signal data frames, said second data frame immediately following said first data frame,

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said transmitting of said second data frame occurring immediately after detecting the tone in said second data frame.

18. (Currently Amended) The apparatus of claim 14, wherein said circuitry is further ~~operative to~~ configured to:

~~detecting~~ detecting that the tone is present in a subsequent data frame that immediately follows said next data frame; and

~~transmitting~~ transmitting a replacement data frame that represents a silence audio signal in place of said subsequent data frame.

19. (Currently Amended) The apparatus of claim 14, wherein said circuitry is further ~~operative to~~ configured to:

~~receiveing~~ receiving a signal from a destination device, the signal indicative of a jitter condition detected by the destination device; and

~~determineing~~ determineing based at least in part on the received signal from the destination device, a number of data frames of which transmission is deferred.

20. (Currently Amended) An apparatus comprising:

a buffer; and

circuitry coupled to the buffer and ~~operative~~ configured to:

~~receiveing~~ receiving a signal from a destination device, the signal indicative of a jitter condition detected by the destination device; and

~~determineing~~determineing, based at least in part on the received signal, a number of outbound telephony signal data frames for which transmission is to be deferred in case of detecting a tone in the outbound telephony signal data frames;

selectively ~~deferring~~deferring transmission based on determined number of frames from the received sequence of outbound telephony signal data frames in response to the detected tone;

~~transmittin~~transmitting said determined number of frames if the detected tone has a duration that is less than a predetermined duration; and

selectively ~~replacing~~replacing each of said determined number of frames with a respective replacement data frame and transmit said replacement data frames in response to the duration of the detected tone at least equaling to the predetermined duration, each said replacement data frame representing a silence audio signal.

23. (Currently Amended) An apparatus comprising:

a buffer; and

circuitry coupled to the buffer and ~~operative~~ configured to:

analyzeing a first telephony signal data frame to determine whether a tone is present in the first telephony signal data frame;

selectively immediately ~~transmit~~transmitting the first telephony signal data frame in response to the first telephony signal data frame not including the tone;

selectively ~~defer~~deferring transmission of the first telephony signal data frame in response to the first telephony signal data frame including the tone;

~~analyzing~~ a second telephony signal data frame to determine whether the tone is present in the second telephony signal data frame, the second telephony signal data frame immediately following the first telephony signal data frame in a sequence of telephony signal data frames;

~~selectively transmit~~ transmitting the first and second telephony signal data frames immediately after analysis of the second telephony signal data frame in response to the second telephony signal data frame not including the tone; and

~~selectively transmit~~ transmitting a respective replacement data frame in place of each of the first and second telephony signal data frames in response to the second telephony signal data frame including the tone.

24. (Currently Amended) The apparatus of claim 23, wherein the circuitry is further operative to:

~~analyze~~ analyzing a third telephony signal data frame to determine whether the tone is present in the third telephony signal data frame, the third telephony signal data frame immediately following the second telephony signal data frame in the sequence of telephony signal data frames;

~~transmit~~ transmitting the third telephony signal data frame if it is determined that the tone is not present in the third telephony signal data frame; and

transmitting ~~transmit~~ a replacement data frame in place of the third telephony signal data frame immediately after said analyzing of the third telephony signal data frame if it is determined that the tone is present in the third telephony signal data frame and if it was determined that the tone was present in each of the first and second telephony signal data frames.

26. (Currently Amended) The apparatus of claim 23, wherein the circuitry is further operative ~~to~~ configured to:

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~~determine~~determining that the tone is present in a telephony signal data frame that immediately precedes the first telephony signal data frame in the sequence of telephony signal data frames; and

~~defer~~deferring transmission of said telephony signal data frame that immediately precedes the first telephony signal data frame until analysis of said second telephony signal data frame.

27. (Currently Amended) A system comprising:

an analog-to-digital converter to supply telephony signal data frames;

a buffer coupled to the analog-to-digital converter to temporarily store said telephony signal data frames; and

circuitry coupled to the buffer and ~~operative~~configured to:

~~detect~~detecting a tone in each data frame of a sequence of telephony signal data frames;

~~transmit~~transmitting a first data frame of the sequence of telephony signal data frames immediately after detecting the tone therein;

~~defer~~differing transmission of a last one or ones of the sequence of telephony signal data frames;

selectively ~~transmit~~transmitting the last one or ones of the sequence of data frames and a next data frame that immediately follows the sequence of telephony signal data frames in response to said next data frame not including the tone; and

selectively ~~transmit~~transmitting a respective replacement data frame in place of each one of the last one or ones of the sequence of data frames and in place of said next data frame in response to said next data frame including the tone.

30. (Currently Amended) The system of claim 29, wherein said circuitry is further ~~operative~~configured to:

~~transmit~~transmitting a second data frame of the sequence of telephony signal data frames, said second data frame immediately following said first data frame, said transmitting of said second data frame occurring immediately after detecting the tone in said second data frame.

31. (Currently Amended) The system of claim 27, wherein said circuitry is further ~~operative~~configured to:

~~detect~~detecting that the tone is present in a subsequent data frame that immediately follows said next data frame; and

~~transmit~~transmitting a replacement data frame that represents a silence audio signal in place of said subsequent data frame.



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32. (Currently Amended) The system of claim 27, wherein said circuitry is further ~~operative~~ configured to:

~~receive~~ receiving a signal from a destination device, the signal indicative of a jitter condition detected by the destination device; and

~~determined~~ determineing, based at least in part on the received signal from the destination device, a number of data frames of which transmission is deferred.

33. (Currently Amended) An apparatus comprising:

a ~~storage~~ computer readable medium having stored therein a plurality of computer executable instructions that when executed ~~by a machine~~ result in the following:

detecting a tone in each data frame of a sequence of telephony signal data frames;

transmitting a first data frame of the sequence of telephony signal data frames immediately after detecting the tone therein;

deferring transmission of a last one or ones of the sequence of telephony signal data frames;

selectively transmitting the last one or ones of the sequence of data frames and ~~said~~ a next data frame that immediately follows the sequence of telephony signal data frames in response to said next data frame not including the tone; and

selectively transmitting a respective replacement data frame in place of each one of the last one or ones of the sequence of data frames and in place of said next data frame in response to said next data frame including the tone.

***Allowable Subject Matter***

The following is an examiner's statement of reasons for allowance:

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Claims 1, 14, 27 and 33 are allowed. The prior art discloses a data transmission system comprising of telephony devices capable of detecting a telephony signal tone in a data frame and further transmitting data frames after detection of a telephony signal tone and/or deferring transmission of data frames until a given time.

The prior art however fails to disclose or suggest selectively transmitting a last one or ones of a sequence of data frames and a next data frame that immediately follows the sequence of telephony signal data frames in response to said next data frame not including the tone; and selectively transmitting a respective replacement data frame in place of each one of the last one or ones of the sequence of data frames and in place of said next data frame in response to said next data frame including the tone.

Claims 7 and 20 are allowed. The prior art discloses a data transmission system comprising of telephony devices capable of detecting a telephony signal tone in a data frame and further transmitting data frames after detection of a telephony signal tone and/or deferring transmission of data frames until a given time.

The prior art however fails to disclose or suggest transmitting a determined number of frames if the detected tone has a duration that is less than a predetermined duration; and

selectively replacing each of said determined number of frames with a respective replacement data frame and transmitting said replacement data frames in response to the duration of the detected tone at least equaling the predetermined duration, each said replacement data frame representing a silence audio signal.

Claims 10 and 23 are allowed. The prior art discloses a data transmission system comprising of telephony devices capable of analyzing a telephony signal tone in a data frame and further transmitting data frames after detection of a telephony signal tone and/or deferring transmission of data frames until a given time.

The prior art however fails to disclose or suggest selectively transmitting a first and second telephony signal data frames immediately after analyzing of a second telephony signal data frame in response to a second telephony signal data frame not including a telephony signal tone; and

selectively transmitting a respective replacement data frame in place of each of the first and second telephony signal data frames in response to the second telephony signal data frame including the tone.

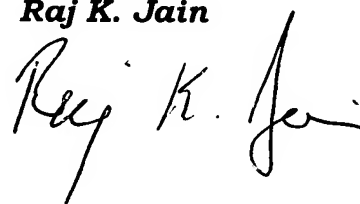
### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raj K. Jain whose telephone number is 571-272-3145. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571-272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**Raj K. Jain**

A handwritten signature in black ink, appearing to read "Raj K. Jain", written in a cursive style.

April 10, 2007

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